

Sexually transmitted disease in Britain: 1985-6

Prepared by the Public Health Laboratory Service Communicable Disease Surveillance Centre

The first report in this series, which describes trends in sexually transmitted diseases in the United Kingdom, was for 1978. Yearly reports were published until 1984. The 1985 report was delayed and, although circulated privately in the PHLS communicable disease report, was not published. This report, therefore covers the years 1985 and 1986. Data from previous years are also reported to describe trends during longer periods.

Sources of data

Returns from departments of genitourinary medicine on DHSS form SBH60 in England, and similar documents in other countries of the UK, are the main sources of data. The clinic returns are analysed yearly by the four national departments of health, and these analyses are forwarded to the Communicable Disease Surveillance Centre (CDSC) for summation for the whole of the UK. On the recommendations of the Korner Committee,¹ the form SBH60 was replaced in 1988 by a new form, KC60 which permits the recording of data about sexual orientation, human immunodeficiency virus (HIV) infections, and the ages of patients with each condition. Departments of genitourinary medicine have been asked to make quarterly returns, so that data may be analysed by both calendar and financial years, and to provide more up to date information on trends in various conditions.

Reports by medical microbiologists are another source of data. These provide trends on infections resistant to antibiotics, such as those due to β lactamase producing *Neisseria gonorrhoeae*, limited information about extragenital infections with *N gonorrhoeae* and the causative organisms of ophthalmia neonatorum, and unique data about HIV and hepatitis B virus infections. These data are collected by the CDSC in England and Wales, by the Communicable Diseases (Scotland) Unit (CD(S)U) in Scotland,

and by the DHSS in Northern Ireland, and where appropriate, collated for the UK by the CDSC.

A third source of data is detailed clinical reports from physicians in genitourinary medicine and other clinicians; these reports provide most of the data about the acquired immune deficiency syndrome (AIDS) and are also collated for the UK at the CDSC.²

Total new cases

New cases (diagnoses) seen at genitourinary medicine clinics increased sixfold after the trough in the early 1950s, which followed the postwar peak, although most of this increase took place in the 15 years after 1970. In England and Wales cases of the named conditions on the report form (SBH60) increased 10-fold since 1951. Several conditions are not itemised separately, but grouped into the categories "other conditions requiring treatment" and "not requiring treatment", and these increased more than fourfold during the same period (fig 1). In the early 1970s there was a large increase in named conditions, but since 1979 "other conditions requiring treatment" have shown the greatest proportional increase, more than doubling compared with an increase of just over one third in named conditions and in those "not requiring treatment". Some of the increase in "other conditions requiring treatment" in women was probably because more attended clinics with vaginosis caused by various bacteria, and that in men was probably because of the epidemic of HIV infection. The epidemic was also probably the main cause of the smaller increase in "other conditions not requiring treatment", which included people tested for antibody to HIV and found to have negative results. The rise in the national workload caused by this epidemic will become more apparent when the 1988 returns on the new form KC60 become available for analysis, although a substantial increase is already evident from local studies.^{3,4}

Postpubertal syphilis and gonorrhoea

The fall in new cases of syphilis and gonorrhoea

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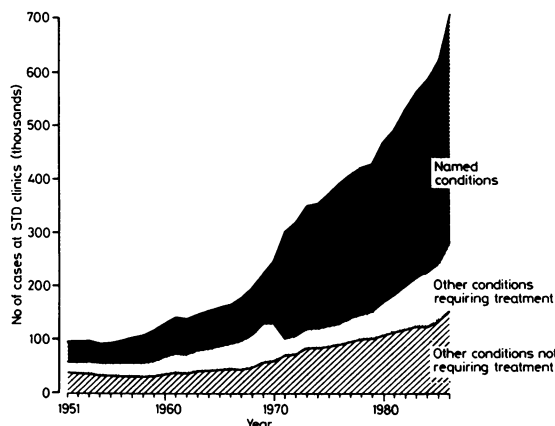


Fig 1 Cases of sexually transmitted diseases reported by clinics in England and Wales, 1951–86.

reported by clinics in the UK continued (table 1), but there were differences by sex and in different age groups, particularly since 1981. In the six years 1981–6 the total new cases of syphilis in men fell by over 50% from 3228 to 1577, and in women by 36% from 983 to 626. Data by age groups were available for primary and secondary syphilis, and they showed that the fall in incidence was most evident in men aged 20 and over; in that age group, age specific rates fell by nearly two thirds (fig 2, top). The fall in cases of postpubertal gonorrhoea was proportionately less, but was also greater in men (26% from 37 346 to 27 597) than women (13% from 20 920 to 18 196). The decline was also most evident in men in older age groups; in those

aged 25 and over the age specific rate fell by 44% from 268.5 to 150.2 per 100 000 (19 995 to 11 880, 41%) (fig 2, bottom).

Although these clinic data did not record sexual orientation, most cases of syphilis in men were probably homosexually acquired,⁵ and they therefore indicate a substantial fall in syphilis in homosexuals. Most gonorrhoea is heterosexually acquired, and a decline in homosexual transmission is therefore likely to be obscured by trends in heterosexual infection. The greater fall in men than women, however, particularly those aged 25 and over, suggests a decrease in the number of cases in homosexuals. This is supported by a decline in laboratory reports of rectal gonorrhoea in England and Wales in men by 60% (930 to 372) between 1981 and 1986. These changes in trends in clinic reports of syphilis and gonorrhoea are consistent with published reports of the declining incidence of both these infections in homosexual men, which were associated with changes in sexual behaviour because of the AIDS epidemic.^{6,7}

A different picture was seen in the group aged under 20. In men the decline in clinic reports of primary and secondary syphilis from 3.2 per 100 000 in 1981 to 1.6 per 100 000 in 1986 (50%) was less than in those aged 20 and over (where it was nearly two thirds). In women the corresponding change was from 2.1 per 100 000 in 1981 to 0.7 per 100 000 in 1985, but then increased in 1986 to 1.0 per 100 000. Postpubertal gonorrhoea in people aged under 20 increased in both sexes between 1981 and 1985, in men from 205 to 219 per 100 000 (7%), and in women from 293 to 309 per 100 000 (6%), but declined sharply in 1986 to 187 per 100 000 in men,

Table 1 Sexually transmitted diseases: reported new cases 1975–86, United Kingdom (from clinic returns to health departments)

Diagnosis	Year 1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986*
Syphilis	3 964	4 306	4 780	4 866	4 385	4 443	4 211	3 929	3 727	3 307	2 723	2 203
Gonorrhoea	65 880	65 281	65 963	63 569	61 616	60 850	58 301	58 778	54 859	53 802	52 406	45 817
Chancroid	76	59	49	57	49	65	100	137	81	44	63	51
Lymphogranuloma venereum	40	39	43	34	36	34	41	38	43	32	32	46
Granuloma inguinale	14	36	56	14	40	20	29	20	23	20	18	20
Non-specific genital infection	94 483	101 651	105 210	107 955	113 138	125 476	132 391	142 072	148 616	155 075	166 039	175 112
Trichomoniasis	21 912	21 903	22 145	21 732	21 222	22 285	21 625	21 517	19 571	17 921	16 630	15 077
Candidiasis	37 740	39 414	41 144	42 524	42 667	48 060	50 954	56 124	62 199	64 173	65 593	68 928
Scabies	3 145	2 749	2 562	2 589	2 391	2 599	2 434	2 304	2 477	2 253	2 255	1 932
Pubic lice	5 838	6 168	6 769	7 505	8 272	8 928	9 749	10 904	10 198	11 461	11 101	10 522
Herpes simplex	6 762	7 547	8 399	9 036	9 576	10 780	12 080	14 842	17 908	19 869	20 347	20 315
Warts	23 126	25 035	26 063	27 272	27 654	31 780	33 480	37 341	42 790	49 884	58 960	75 995
Molluscum contagiosum	801	954	1 019	1 026	1 030	1 228	1 305	1 467	1 700	2 074	2 380	3 044
Other treponemal disease	1 014	1 142	1 117	1 088	1 103	934	884	843	746	669	604	537
Other conditions requiring treatment	44 515	44 848	48 461	52 140	55 408	65 991	73 817	85 315	98 230	109 242	117 792	128 548
Other conditions not requiring treatment	92 955	97 491	104 539	108 596	109 050	117 070	121 918	127 208	132 777	131 070	140 822	154 076
Total	402 265	418 623	438 319	450 003	457 637	500 543	523 319	562 839	595 945	620 896	657 765	702 223

*Provisional figures.

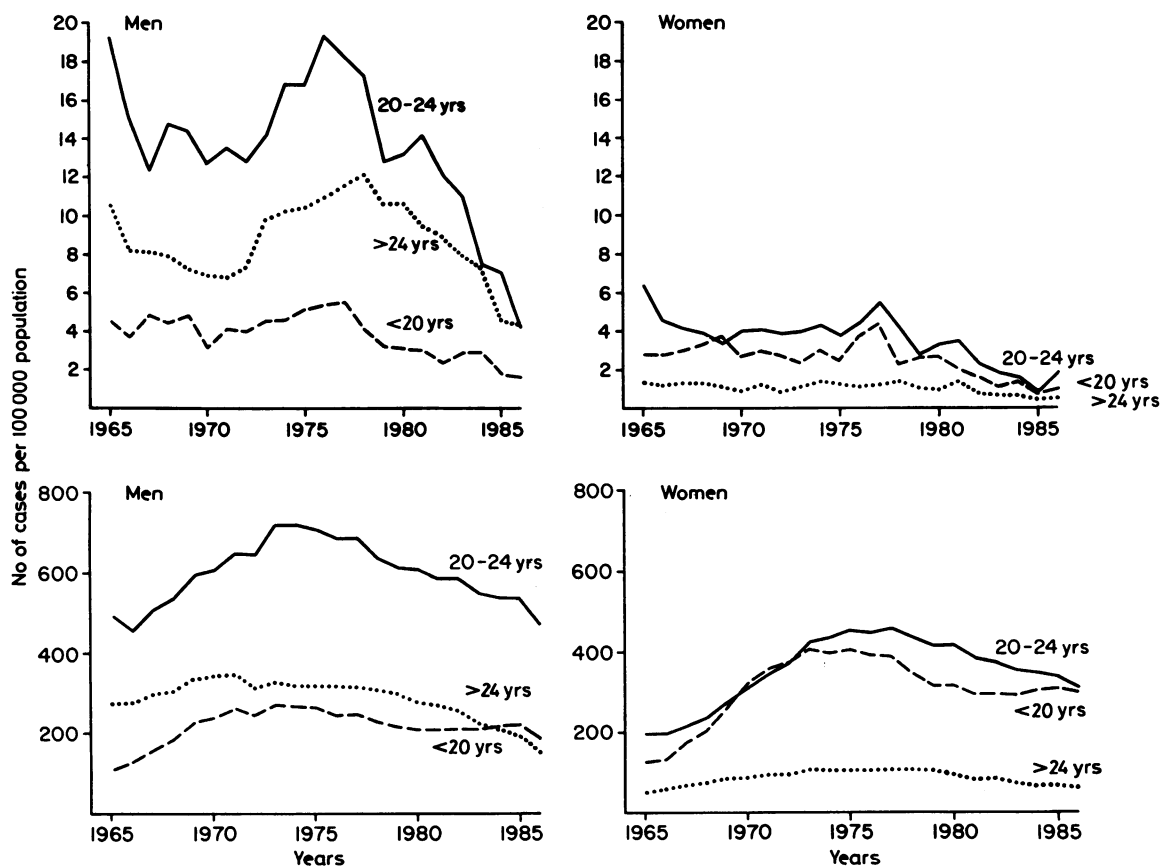


Fig 2 Cases of primary and secondary syphilis (top) and postpubertal gonorrhoea (bottom) reported by clinics in the UK, 1965-86. (Note arbitrary population age groups, < 20, 20-24, and > 24.)

the lowest recorded rate since 1968, and to 297 per 100 000 in women, which was about the same as in 1982 (fig 2). Despite these falls in 1986, the trends for a longer time, 1965 to 1986, show a 2.5-fold increase in postpubertal gonorrhoea in women aged under 20, from 122 to 287 per 100 000; in men the increase was less, 1.5-fold from 110 to 187 per 100 000.

In the United States of America a rise in infectious syphilis has been reported in young heterosexuals,⁸ as well as a continuing rise in infections due to penicillin resistant strains of *N gonorrhoeae*.⁹ The recent changes observed in the UK suggest that a similar change of increasing heterosexual spread of these infections in young people may be taking place.

Congenital syphilis

New cases of congenital syphilis seen at clinics were recorded in children analysed in groups aged under 2 years, or 2 and over. Eight to 19 children aged under 2

were reported each year in 1965-82, and the number fell to the lowest recorded level in 1983, when only one case was reported. Four were reported in 1984 and three in 1985, but in 1986 there was a rise to nine cases, possibly associated with the increase in syphilis in young adult women from 15 reported cases in 1985 to 21 in 1986 in those aged under 20, and from 18 to 42 during the same period in those aged 20-24. This emphasises the need to continue routine antenatal screening, a procedure questioned in recent years when syphilis was declining in women, but nevertheless justified on economic grounds alone.¹⁰ New cases of congenital syphilis in children aged 2 and over showed a continuous decline from over 300 cases in 1965 to fewer than 100 each year since 1983.

Infections with β lactamase producing strains of *Neisseria gonorrhoeae*

The number of laboratory reported infections with β

lactamase producing strains of *N gonorrhoeae* in the UK declined from 1227 in 1984 to 759 in 1985 and to 699 in 1986, although the proportion acquired in the UK remained about the same at just over 50%. Under-reporting of these infections has been shown to be increasing, and in 1981 was estimated at 23.5%,¹¹ but further under-reporting is unlikely to account for the drop of nearly one third in 1985/86. It therefore seems probable that this fall in laboratory reports indicates a real decline in the incidence of the infection. This contrasts with trends in the USA where infections due to β lactamase producing strains have risen continuously since 1984 and where other antibiotic resistant strains of *N gonorrhoeae* have been reported.⁹

Non-specific genital infection

New clinic attendances in the UK for non-specific genital infection again increased in 1986 (table 1), and as in previous years the yearly increase was greater in women (11%) than in men (3%). Some of the increase may have been due to the recording of "epidemiological treatment", that is treatment of sexual contacts exposed to infection, which is practised widely.¹² However, the steep rise in laboratory reports of genital *Chlamydia trachomatis* (fig 3), the causative agent in about half the cases, suggests that this represents a real increase in the disease; reports of infection in women rose over fivefold from 3473 in 1981 to 18 595 in 1986. Chlamydial infection is associated with pelvic inflammatory disease, which also increased (fig 3), and also with consequent ectopic pregnancy, which resulted in about 3000 hospital discharges and deaths in 1967 rising to over 4600 in 1985.

The continuing rapid rise in non-specific genital infection is surprising when postpubertal gonorrhoea is falling. Data on non-specific genital infections were not available in age groups, however, and the increase was possibly mainly in young people, in whom gonorrhoea has increased in recent years. Whatever the explanation, the trends in non-specific genital infection and in gonorrhoea suggest increasing heterosexual transmission of infection and indicate that the publicity about the AIDS epidemic has had little effect on heterosexual behaviour, particularly in young people.

Virus infections

The rise in yearly clinic reports of genital warts continued and was greater in 1986 (29% more than in 1985) than in previous years (18% in 1985 and 17% in 1984). This rise may have been due to increased heterosexual spread of infection in young people, but was possibly also because of more interest in the infection, improved diagnosis and reporting, and the publicity given to the suggested association of the causative agent, human papilloma virus (HPV), with

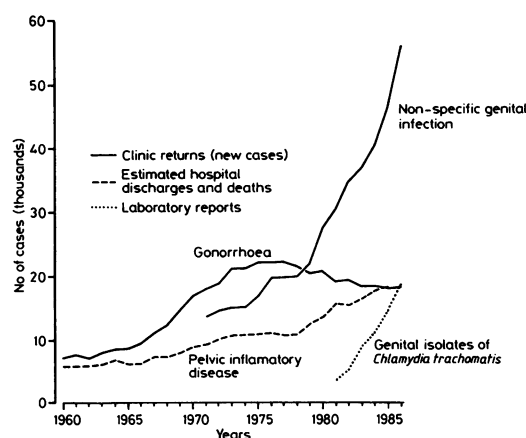


Fig 3 Cases of pelvic inflammatory disease (PID), gonorrhoea, non-specific genital infection, and genital chlamydial infection in women in England and Wales, 1960–86. (Hospital discharges and deaths from PID in England only from 1982. International Classification of Diseases Nos 612–5 for PID in 1960–79, ICD 614 since 1980.)

carcinoma of the cervix.¹³ The death rate from cervical cancer in patients aged under 30 has increased since the late 1960s; it was 0.22 per 100 000 in 1968 and rose fourfold to 0.89 in 1986. During the same period the overall death rate from cervical cancer showed a continuing gradual decline until 1984 (when it was 9.1 per 100 000), but increased in 1985 to 9.3 per 100 000, and again in 1986 to 9.5 per 100 000. The possible link between HPV infection and this rising death rate from carcinoma of the cervix in young women has led to the greatly increased use of colposcopy to detect precancerous lesions, and has consequently placed an increased workload on clinics.

Trends in herpes simplex infection differed from those of genital warts; cases reported by clinics rose only 2% in 1985 compared with 11% to 12% in 1984. In 1986 cases reported both by clinics and laboratories fell for the first time since these data became available; there were 20 315 clinic returns, 32 fewer than 1985 (table 1) and 13 786 laboratory reports, over 1000 fewer than the previous year. Herpes simplex infections have possibly declined because the widespread use of acyclovir has prevented recurrences of the disease.

The acquired immune deficiency syndrome (AIDS)

Up to the end of 1987, 1227 cases of AIDS had been reported in the UK and a full account of the epidemic to that date has been published recently.¹⁴ The review published here covers the years 1985–6, by the end of which 571 cases of AIDS had been reported, 305 of them during the year 1986, 160 in 1985, 77 in 1984, and 29 in 1983 or before (table 2). The number of cases reported about doubled each year, and most of the

Table 2 AIDS surveillance UK: transmission category

Transmission category	Number of cases by date of report to 31 Dec 1983			Jan-Dec 1984			Jan-Dec 1985			Jan-Dec 1986			Total No (%)
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Homosexual or bisexual man	24		24	68		68	142		142	265		265	499 (87)
Intravenous drug abuser*	1	0	1	2	0	2	3	0	3	8	2	10	16 (3)
Haemophiliac	2	0	2	1	0	1	6	0	6	15	0	15	24 (4)
Blood component recipient:													
Abroad	0	0	0	1	0	1	1	1	2	2	2	4	7 (1)
UK	0	0	0	0	0	0	3	0	3	0	1	1	4 (1)
Heterosexual contact:													
Abroad	0	1	1	0	5	5	1	0	1	6	0	6	13 (2)
UK	0	1	1	0	0	0	1	1	2	0	1	1	4 (1)
Child of at risk or infected parent	0	0	0	0	0	0	0	0	0	1	2	3	3 (1)
Other	0	0	0	0	0	0	0	1	1	0	0	0	1 (0.2)
Total	27	2	29	72	5	77	157	3	160	297	8	305	571 (100)

*Including patients who were also homosexual or bisexual men.

increase was in homosexual and bisexual men. Changing sexual behaviour in these groups has been documented in London, where the rate of increase in seroprevalence of antibody to HIV has slowed⁷ and is reflected in the decline in syphilis and gonorrhoea in men. Because of the long latent period between infection with HIV and the development of AIDS, however, several years are likely to elapse before the slowing increase in prevalence of antibody to HIV is shown by a reduction in the rate of increase in reports of clinical AIDS.

Cases of AIDS in haemophiliacs and transfusion recipients also increased, but during 1985 transmission by blood and blood products was controlled in the UK by self deferral by potential blood donors, screening for antibody to HIV, and heat treating clotting factors. Although reported cases of AIDS will increase in haemophiliacs and transfusion recipients for several years until the effect of these measures becomes apparent, a rapid fall in the number of new cases is then expected.

The rise in reported cases of AIDS in intravenous drug abusers was small, but is of particular concern because of the potentially wide and rapid spread of infection within this group, as well as from this group to the heterosexual population and to the infants of HIV infected mothers. Heterosexual spread of HIV infection was recorded in the UK in 1985 in the partners of haemophiliacs.¹⁵ Heterosexual spread appeared to be limited, however, and was confined to the sexual partners of people in this and other recognised risk groups. By the end of 1986, 17 (3%) of all reported patients with AIDS were heterosexuals, a proportion that may well increase and fully justifies public education to limit heterosexual spread.

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